

DELIVERY OF SPRINT 1

TEAM ID	PNT2022TMID50055
PROJECT NAME	Smart Waste Management System for metropolitan cities

Sprint 1

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "1hdx6w"
deviceType = "sprint_1"
deviceId = "12345678"
authMethod = "token"
authToken = "12345678"
# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="smart bin opened":
        print ("The Smart Bin is Open now")
    else :
        print ("The Smart Bin is Close now")
#print(cmd)
try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod,
"auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("Caught exception connecting device: %s" % str(e))
    sys.exit()
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10
times
deviceCli.connect()
while True:
    distance=random.randint(0,200)
    weight=random.randint(0,10)
    data = { 'distance' : distance, 'weight': weight }
    def myOnPublishCallback():
        print ("Published Data to IOT Watson: \n Distance= %s cm\n" % distance, " Weight = %s Kg\n" %
weight)
    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoTF")
        time.sleep(10)
```

```

deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()

```

```

sprint_1.py - C:/Users/Admin/Desktop/sprint_1.py (3.7.0)
File Edit Format Run Options Window Help

import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "1hdx6w"
deviceType = "sprint_1"
deviceId = "12345678"
authMethod = "token"
authToken = "12345678"
# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="smart bin opened":
        print ("The Smart Bin is Open now")
    else :
        print ("The Smart Bin is Close now")
#print(cmd)
try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("Caught exception connecting device: %s" % str(e))
    sys.exit()

# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
deviceCli.connect()
while True:
    distance=random.randint(0,200)
    weight=random.randint(0,10)
    data = { 'distance': distance, 'weight': weight }
    def myOnPublishCallback():
        print ("Published Data to IOT Watson: \n Distance= %s cm\n" % distance, " Weight = %s Kg\n" % weight)
    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoT")
        time.sleep(10)
    deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()

```

Ln: 23 Col: 52

```

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

Published Data to IOT Watson:
Distance= 26 cm
Weight = 5 Kg

Published Data to IOT Watson:
Distance= 88 cm
Weight = 10 Kg

Published Data to IOT Watson:
Distance= 19 cm
Weight = 5 Kg

Published Data to IOT Watson:
Distance= 14 cm
Weight = 3 Kg

Published Data to IOT Watson:
Distance= 5 cm
Weight = 6 Kg

Published Data to IOT Watson:
Distance= 68 cm
Weight = 10 Kg

Published Data to IOT Watson:
Distance= 97 cm
Weight = 4 Kg

Published Data to IOT Watson:
Distance= 62 cm
Weight = 6 Kg

Published Data to IOT Watson:
Distance= 140 cm
Weight = 9 Kg

Published Data to IOT Watson:
Distance= 90 cm

```

Ln: 40 Col: 10

IBM Watson IoT Platform

951219106016@smartinternz.com
ID: 1hdx6w

Browse Action Device Types Interfaces

Search by Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added
12345678	Connected	sprint_1	Device	17 Nov 2022 23:05

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
IoTSensor	{"distance":189,"weight":2}	json	a few seconds ago
IoTSensor	{"distance":147,"weight":8}	json	a few seconds ago

IBM Watson IoT Platform

951219106016@smartinternz.com
ID: 1hdx6w

Browse Action Device Types Interfaces

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
IoTSensor	{"distance":62,"weight":5}	json	a few seconds ago
IoTSensor	{"distance":157,"weight":10}	json	a few seconds ago
IoTSensor	{"distance":93,"weight":1}	json	a few seconds ago
IoTSensor	{"distance":33,"weight":9}	json	a few seconds ago
IoTSensor	{"distance":27,"weight":0}	json	a few seconds ago